Abstract

A class of extensions of an order on a set to an order on its non-empty multisets is characterised by three properties: Monotonicity, Equivalence and Independence. This class is defined by particular weighted sum representations. An additional property selects the Borda Score as a special case. The general class characterised have been used in practice in planning responses to domestic violence, particularly between intimate partners, and is recommended for this purpose by the Centre for Disease Control in Atlanta. It is also used in the construction of the Global Peace Index and has been recommended for use in measuring prison violence and regulation of violence in TV, digital games and for racism, hate crimes and other violent crimes.